



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,750	12/02/2003	Brooks R. Lesert	LES03 P-300A	3255
277	7590	05/17/2005	EXAMINER	
PRICE HENEVELD COOPER DEWITT & LITTON, LLP			GUADALUPE, YARITZA	
695 KENMOOR, S.E.				
P O BOX 2567			ART UNIT	
GRAND RAPIDS, MI 49501			2859	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/725,750

Applicant(s)

LESERT, BROOKS R.

Examiner

Yaritza Guadalupe McCall

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/02/2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/2/2003
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 – 5, 7 – 14, 16 – 20, 22 – 29 and 31 are rejected under 35 U.S.C. 102 (b) as being anticipated by Jackson et al. (US 6,839,972).

With respect to claim 1, Jackson et al. discloses a portable wheel alignment apparatus comprising a portable unit (290) including a vertical post (See attached figure 7B), the vertical post having a camera boom (290) thereon, the camera boom being adapted to move along a rail (293), at least one light reflector (80a, 80b, 80c, 80d) adapted to be connected to a wheel of a vehicle (See Figure 1A), and at least one docking station (391, 393; see attached figure 7B) for the portable unit, each one of the at least one docking station being configured to be positioned in front of a bay for a vehicle (as shown in figure 1A) whereby the portable unit can be removably positioned in the at least one docking station and an alignment of the wheels of the vehicle in the bay can be measured through interaction of the camera boom and the at least one light reflector.

Jackson et al. teaches on an alternate embodiment shown in Figures 1C and 7A, a wheel alignment apparatus having a camera boom (230) adapted to move vertically on the vertical post (52) and further suggests to combine these embodiments in order to provide an alignment apparatus that moves in an X – Y plane (See Column 10, lines 11 – 23). These suggested arrangement will provide an alignment apparatus having a docking station (391, 393), a portable unit having a vertical post (See attached figure 7B) and a camera (290) adapted to move vertically on the vertical post as shown in Figure 1C.

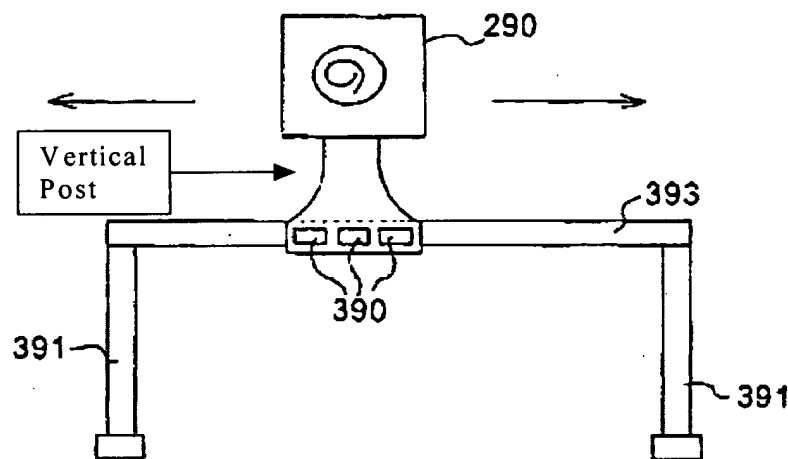


FIG. 7B

In regards to claim 2, Jackson et al. also discloses a portable wheel alignment apparatus wherein the at least one docking station comprises at least two docking stations, since as suggested from figure 1A, there is a left side alignment module (2) and a right side alignment module (4), each requiring a support as shown in figures 1C, 7A and 7B.

Regarding claim 3, Jackson et al. also teaches a portable wheel alignment apparatus wherein the camera boom of the portable unit includes at least one camera (10R, 290).

With regards to claim 4, Jackson et al. further discloses a portable wheel alignment apparatus wherein the at least one camera comprises two cameras, one on the left side and one on the right side as shown in figure 1A.

In regards to claim 5, Jackson et al. discloses a portable wheel alignment apparatus wherein the portable unit further includes a computer (900, 904) for determining the alignment of the wheels of the vehicle (See Columns 12 and 13).

With respect to claim 7, Jackson et al. teaches a portable wheel alignment apparatus wherein the portable unit and the at least one docking station including an engaging mating structure (390); and the engaging mating structure properly position the portable unit in the at least one docking station when engaged (see Figure 7B).

In regards to claims 8 and 23, Jackson et al. discloses an apparatus (See Figures 1C and 7B) having a portable unit and at least one docking station, said portable unit mounted to a vertical post (52) and including a retractable pin (252, 254, 256, 258) configured to be inserted into an opening to lock the portable unit in place in the vertical post of the at least one docking station.

Regarding claim 9, Jackson et al. discloses a portable wheel alignment apparatus wherein the portable unit includes at least one bump roller/wheels (390); the at least one docking station includes a front face (See Figure 7B); and the at least one bump roller is configured to roll on the front face of the at least one docking station as the portable unit is positioned in the at least one docking station.

With respect to claims 10 and 25, Jackson et al. teaches a portable wheel alignment apparatus wherein the portable unit includes what could be considered at least one push bar (393) for easily moving the portable unit, if needed by the user.

In regards to claims 11 and 14, Jackson et al. also teaches a portable wheel alignment apparatus wherein the at least one docking station is incorporated into a track (393); and the portable unit includes rollers (390) slidable along the track, and wherein the track is straight.

With respect to claim 12, Jackson et al. further teaches a portable wheel alignment apparatus wherein the track is capable of being attached to a ceiling of the bay.

With respect to claim 13, Jackson et al. discloses a portable wheel alignment apparatus wherein the track includes a pair of support posts (391) configured to be mounted to a floor of the bay (See Figure 7B).

In regards to claim 16, the method of measuring the alignment of a wheel of a vehicle comprising the step of providing a portable unit including a vertical post, the vertical post having a camera boom with a camera thereon (See Figure 7B); connecting a light reflector to the wheel of the vehicle (See Figure 1A); engaging the portable unit with a docking station (See Figure 7B); moving the camera boom vertically on the vertical post (See Columns 8 and 10, lines 39 – 41 and 11 – 23 respectively); reflecting light off of the light reflector; and receiving the light reflected off of the light reflector with the camera will be perform by the regular operation of the apparatus disclosed by Jackson et al.

Regarding claim 17, the method of measuring the alignment of a wheel of a vehicle further including the step of moving the portable unit to a subsequent station for docking the portable unit; engaging the portable unit with the subsequent station; moving the camera boom vertically on the vertical post; connecting a secondary light reflector to a subsequent wheel of a subsequent vehicle; reflecting light off of the secondary light reflector; and receiving the light reflected off of the secondary light reflector with the camera will be perform by the regular operation of the apparatus disclosed by Jackson et al.

In regards to claims 18 – 20, the method of measuring the alignment of a wheel of a vehicle including the steps of providing a portable unit includes providing the camera boom with at least one camera (right and left side cameras in figure 1A); wherein the at least one camera comprises two cameras; and providing a portable unit includes providing the portable unit with a computer (900, 904) and further including determining the alignment of the wheels of the vehicle with the computer will be perform by the regular operation of the apparatus disclosed by Jackson et al.

With respect to claim 22, the method of measuring the alignment of a wheel of a vehicle further including the step of providing the portable unit and the docking station with engaging mating structure; and engaging the engaging mating structure to properly position the portable unit in the docking station will be perform by the regular operation of the apparatus disclosed by Jackson et al.

Regarding claims 24 and 26, the method of measuring the alignment of a wheel of a vehicle including the steps of providing a portable unit includes providing the portable unit with at least one bump roller rollers (390); and engaging the portable unit with the docking station includes rolling the at least one bump roller/ rollers on a front face of the docking station and the portable unit including rollers slidable along the track will be perform by the regular operation of the apparatus disclosed by Jackson et al.

Art Unit: 2859

In regards to claim 27, the method further including the step of attaching the track to a ceiling will be performed by the regular operation of the apparatus disclosed by Jackson et al.

Regarding to claim 28, the apparatus disclosed by Jackson et al. also performs the method of measuring the alignment of a wheel of a vehicle wherein the track includes a pair of support posts (391) configured to be mounted to a floor of the bay.

With respect to claim 29, Jackson et al. shows an apparatus wherein the track is straight.

With regards to claim 31, Jackson et al. teaches a portable wheel alignment apparatus comprising a portable unit including a camera boom vertically movable thereon, the camera boom including at least one camera (a right side and a left side camera shown in figure 1A), at least one light reflector (80a, 80b, 80c, 80d) adapted to be connected to a wheel of a vehicle; and at least two docking stations (See figure 7B, each of the left and right side modules including one for supporting the camera) for the portable unit, each one of the at least two docking stations being configured to be positioned in front of a bay for a vehicle whereby the portable unit can be removably positioned in the at least one docking station and an alignment of the wheels of the vehicle in the bay can be measured through interaction of the camera boom and the at least one light reflector; wherein the portable unit and each of the at least two docking stations include engaging mating structure (393); and the engaging mating structure engage to selectively position the portable unit in one of the at least two docking stations.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6, 15, 21 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson et al. (US 6,839,972).

Jackson et al. discloses an alignment apparatus as stated in paragraph 2 above.

Jackson et al. does not disclose the hydraulically or pneumatically driven cylinder for moving the camera boom vertically on the vertical post as stated in claims 6 and 21. Jackson et al. does not disclose the track having a curved section as stated in claim 15 and 30.

Regarding claims 6 and 21 : Jackson et al. discloses an alignment apparatus which allows for a combination of embodiments resulting in an apparatus having a docking station and a portable unit mounted to said docking station and having a vertical post for vertically moving the camera along the post, said vertical movement provided by the actuation of a lever (260) which allows the camera boom (230) to slide up and down (See Column 8, lines 39 – 41). The use of

Art Unit: 2859

the particular type of a hydraulically or pneumatically driven cylinder for moving the camera boom vertically on the vertical post claimed by applicant is considered to be nothing more than a choice of engineering skill, choice or design because 1) neither non-obvious nor unexpected results, i.e., results which are different in kind and not in degree from the results of the prior art, will be obtained as long as the camera boom and camera are vertically adjustable along the vertical post, as already suggested by Jackson et al., 2) the a hydraulically or pneumatically driven cylinder claimed by Applicant and the repositioning mechanism including a plate and lever used by Jackson et al. are well known alternate types of positioning mechanisms which will perform the same function, if one is replaced with the other, of adjusting the vertical displacement of the camera along the vertical post, and 3) the use of the particular type of a hydraulically or pneumatically driven cylinder by Applicant is considered to be nothing more than the use of one of numerous and well known alternate types of positioning mechanism that a person having ordinary skill in the art would have been able to provide using routine experimentation in order to adjust the vertical displacement of the camera along the vertical post, as already suggested Jackson et al.

With respect to claims 15 and 30 : the portable wheel alignment apparatus disclosed by Jackson et al. includes a docking station (shown in figure 7b) having a straight track. Furthermore, the use of a track having a curved section, absent any criticality, is only considered to be an obvious modification of the shape or configuration of the track shape disclosed by Jackson et al. that a person having ordinary skill in the art at the time the invention was made

Art Unit: 2859

would have found obvious to provide since the courts have held that a change in shape or configuration, without any criticality, is within the level of skill in the art as the particular shape claimed by Applicant is nothing more than one of numerous shapes that a person having ordinary skill in the art will find obvious to provide using routine experimentation based on its suitability for the intended use of the invention. See *In re Dailey*, 149 USPQ 47 (CCPA 1976). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to change the track shape to a shape having a curve in order to increase the versatility of the apparatus by increasing the range of motion of the portable unit along the track.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references are considered of relevance to the present application.

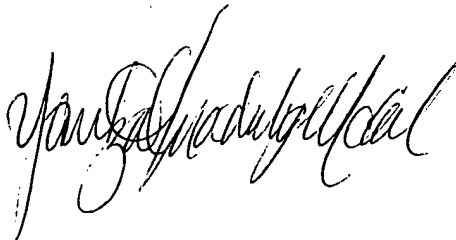
- a. Jackson (US 6,526,665)
- b. Bremer (US 6,438,855)
- c. Stopa (US Pub. No. 2004/0139620)
- d. Corgi (US 6,842,238)
- e. Uno (US 6,412,183)

Art Unit: 2859

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yaritza Guadalupe McCall whose telephone number is (571)272-2244. The examiner can normally be reached on 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Yaritza Guadalupe-McCall', is positioned above the printed name.

Yaritza Guadalupe-McCall
Patent Examiner
Art Unit 2859

YGM
May 16, 2005